

# **Anthrax Detection: A Local Perspective**

**Testimony by Chief Michael P. Neuhard  
Fairfax County Fire and Rescue Department**



**Before the House Government Reform Subcommittee on  
National Security, Emergency Threats, and International  
Relations**

**Tuesday, April 5, 2005**

## **EXECUTIVE BIO**

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Chief Neuhard is a 28-year veteran of the Fairfax County Fire and Rescue Department, where he currently serves as the Fire Chief and Fairfax County Fire Marshal. In these positions, he directs a staff of 1,436 personnel (including 1,225 uniformed members), 300 operational fire and EMS volunteers, and 35 fire stations. Chief Neuhard plans, coordinates, and directs the overall operation of the Fire and Rescue Department, including fire suppression, hazardous material abatement, emergency medical services, fire prevention, technical rescue, and administrative and support services. During his career with the Department, Chief Neuhard has served as the Assistant Chief of Administrative Services, Deputy Chief of Special Operations, Hazardous Materials Response Team Coordinator, and Head of Hazardous Materials Services in the Fire Prevention Division.

For the last decade, Chief Neuhard has served on various national, state, regional, and county level boards and committees, as well as a number Department work groups including Chair of its Strategic Planning Leadership Team. As a 2001 graduate of “*Leadership Fairfax*,” Chief Neuhard continues to be dedicated to and an active member of the Northern Virginia community where he presently serves on the Fairfax County Domestic Violence Prevention Policy Coordinating Council, National Technology Transfer Center - Emergency Response Advisory Committee, and the Washington Metropolitan Council of Governments Fire Chiefs Committee. He also serves as a member of the Virginia Wireless E-911 Services Board. Since his appointment by the Governor in 2002, Chief Neuhard has served on the Secure Virginia Panel (now known as the Secure Commonwealth Panel).

Chief Neuhard is a graduate of Mary Washington College, the Northern Virginia Community College, and the University of Virginia’s Weldon Cooper Center for Public Service Senior Executive Institute. His professional affiliations include the Virginia State Fire Chiefs’ Association, the International Association of Firefighters, and the International Association of Fire Chiefs.

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### **Introduction**

Chairman Shays, distinguished members of the Subcommittee, my name is Michael P. Neuhard, and I am the Fire Chief for the Fairfax County Fire and Rescue Department located in the Northern Virginia area of the National Capital Region. Thank you for the opportunity to provide you with a local perspective on anthrax detection and the problems associated with first responder activities during potential anthrax emergencies.

The Fairfax County Fire and Rescue Department serves over one million residents, as well as workers in local businesses and industry, and transient visitors who pass through our jurisdiction on one of the interstate highways that traverse our County. We provide emergency service through a network of 35 strategically placed fire stations and a staff of over 1800 dedicated men and women. Our stations are staffed 24 hours a day, 7 days a week, 365 days a year. We are an all-hazard fire department, providing fire suppression services, basic life support (BLS) and advanced life support (ALS) emergency medical services, and technical specialties to include specialized rescue and cave-in capabilities, hazardous materials response and mitigation and marine operations. The Department also provides fire and hazardous materials preventative services through its Fire Marshal's Office. We respond to approximately 90,000 calls for service a year and our call volume continues to grow.

I provide you with this information as background for a sense of the depth and scope of the services provided in a large urban area that has benefited from the efforts of regional cooperation and coordination. We continue to work toward achieving cooperation and coordination among our diverse jurisdictions in Northern Virginia and the Metropolitan Washington region. In addition, because of our proximity to Washington, DC, and the potential targets this area presents, we have been fortunate enough to receive federal funding support toward our goals of planning, preparedness, response, and mitigation activities for all types of emergencies, but especially for expanding WMD response capabilities.

### **Background**

During the last four years, Fairfax County, in conjunction with the region, has had the unfortunate occasion to respond to thousands of potential anthrax incidents.

These have included letters sent through the mail, threats, and fixed detection system alerts that have resulted in death, illness, public hysteria, and disruption to critical infrastructure. Recently, a detection device activated at a Department of Defense (DOD) facility located at 5111 Leesburg Pike, which occurred simultaneously with a potential anthrax incident at the Pentagon in Arlington County, Virginia. These experiences, along with an increase in training, development of operational procedures, and use of technology have provided us an opportunity to face and understand the challenges, issues, and problems associated with the response to potential anthrax incidents. We have made significant strides since the fall of 2001; however, in some areas we still have considerable room for improvement. Efforts toward coordination and cooperation during an incident continue to be strengthened through federal programs and local initiatives. Interoperability of communications is being addressed, incident management principles consistent with the National Incident Management System (NIMS) are being implemented, notification methods and techniques are being designed, implemented, and improved upon. Likewise, considerable effort has been put into field detection, screening, and analysis for potential biological agents. While there is much room to improve in all of these areas, our recent experience shows that at the most fundamental level, the question of determining if we are dealing with a biological agent in an accurate and timely manner remains elusive. Current anthrax detection, field screening, and lab analysis does not provide local emergency responders, public health officials, or law enforcement with timely, accurate, and reliable information upon which to base decisions about public health and safety.

### **Anthrax Detection Issues**

Based on our experience in Fairfax County we believe there are four areas in the anthrax detection chain which present significant challenges during the first 72-hours of an incident. These issues reside in the following areas:

First, is the current state of fixed detection systems being operated in local jurisdictions at government mail handling facilities. Fixed mail handling facilities are using different detection technologies with varying degrees of reliability. These devices use different screening methods, and widely different protocols. In many instances, the placement of these devices is not coordinated with local officials and in some cases, the existence of the machines may not be known. Additionally, the type of device being utilized and again protocols in use may not be known to local responders. Furthermore, these facilities may not even have information or technical support available for these detectors after normal business hours, even during an emergency incident. For example, there is a postal facility in Fairfax County that has worked very diligently with officials to develop joint protocols for response to an activation of their biological detection system (BDS.) This includes identifying roles and responsibilities of each entity

during the initial response. Conversely, when the 911 call was received for the DOD facility on Leesburg Pike, first responders were not even aware that a detection device was located within the facility, responders were not aware that old technology (particle counter) was being used as the detection device. Furthermore, there were no joint or collaborative protocols in place for this facility, a stark contrast from our postal facility agreement.

The second issue is the lack of reliable field screening capabilities for first responders. Currently first responders of any type, i.e., fire and rescue, public health, and law enforcement, have only limited methods available to them to conduct field screening of anthrax or other biological agents. None of the field test devices on the market are endorsed by scientists or laboratories as being reliable, accurate, and consistent. This prevents the first responders from having appropriate technical information to support decisions in the field.

The third issue is obtaining the laboratory results of samples and ensuring that they are available for decision makers during an incident. Once field samples have been taken and transported to a laboratory, which in many instances is a federal facility, local and state officials are not fully aware of, nor included in the process. This includes not knowing all of the participating agencies, i.e., United States Army Medical Research Institute for Infectious Diseases (USAMRIID) Centers for Disease Control and Prevention (CDC), DOD, etc., the status of the samples, the time-line for definitive results, nor the actual process for obtaining the results so they can be utilized for critical decision making. During the recent events, it is questionable whether the federal decision makers understood where in the process the samples were as they attempted to make decisions and articulate this to the local/state representatives. It was difficult with two simultaneous events to determine which of the locations samples, testing procedures, and time-lines the subject matter experts were referring to. This problem leads to local/state responders making decisions based on no information, inadequate information, and sometimes unreliable information. This exacerbates the stress on the potential victims and complicates the decisions to provide prophylaxis medications, reoccupy and open buildings, and convey the appropriate message to the public.

And finally, the lack of confidence in the ability of laboratories to produce timely, accurate, and reliable analysis is troubling. Since emergency responders have limited ability to identify a potential biological agent in the field, they rely heavily on the testing laboratories for accurate and timely information. It is unconscionable that a laboratory could provide positive polymerase chain reaction (PCR) and culture test results for a biological agent that was not present. These tainted findings produced a tremendous hardship on the occupants of 5111 Leesburg Pike, increased public concern, had an adverse impact on the building/infrastructure, and consumed public safety resources

unnecessarily. At a minimum, it is expected that laboratories utilized for routine and incident-specific samples should be certified, and part of the laboratory response network. Anything less is unacceptable. Additionally, initial results, i.e., PCR for emergency incidents, should be available to decision makers within 4 to 6 hours as opposed to the 12-15 hours indicated during the recent events.

## **Conclusion**

We have come along way since the fall of 2001 with our capabilities to detect, respond to, and mitigate potential anthrax threats. But as discussed today, there is still much work to be done. It is imperative that the federal, state, and local authorities partner in these efforts to improve detection, screening, sampling, and analysis of potential anthrax contamination. The federal government can help by ensuring (1) all the stakeholders are at the table as we further refine capabilities; (2) provide ample funding to continue research that ensures reliable, consistent, and timely detection, field screening, sampling, transportation, and lab analysis; (3) require federal agencies operating detection systems in localities to coordinate with local first responders and public health officials; and (4) ensure that federal agencies employ similar protocols across federal agency lines in the detection of a response to potential anthrax incidents (unified federal approach).

While the federal government must continue to provide leadership in the anthrax response arena, it must remember that when an incident strikes, it is the localities, the local citizens, the local government, the local response agencies, and local health agencies that will be impacted and challenged with the appropriate response. We must recognize this, we must accept this, and we must do everything possible to provide appropriate detection, screening, and analysis so we can answer as quickly and as confidently as possible the question, do we have anthrax here? Thank you very much.